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Original Article

The impact of marriage enrichment program via distance learning on mental health and its dimensions among Iranian newly-wed couples: a six-month follow-up

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ABSTRACT

Background and objectives: Nowadays, less attention has been paid to the mental health and educational needs among couples. The present study set out to test a modern approach to determine the impact of marriage enrichment program via distance learning on mental health and its dimensions. Method: To this aim, 80 couples who enjoyed criteria to enter the study were selected by using simple random method and were divided into two experimental (n=40couple) and control (n=40couple) groups. Distance intervention was conducted for the experimental group in 6 topics over 12 weeks. Data were collected by using General Health Questionnaire (GHQ-28) and analyzed by using t-test (independent and paired samples) and AVCOVA test at a significance level of $p<0.05$. Results: After intervention, a significant improvement was observed in the level of mental health and its dimension (Anxiety and sleep disorder, somatic symptoms, and social function) in the experimental group, compared to the control group ($p<0.001$), which was maintained over a 6-month follow-up. However, no significant effect was observed in depression symptoms. Discussion and conclusion: Distance intervention led to an improvement in mental health level and its dimension among the selected couples. It seems that marriage enrichment via distance learning especially using social networks can be an effective way to improve the mental health among couples and families.

Keywords: Marriage enrichment, mental health, distance learning.

Introduction

Mental health is one of the important issues in advancing the goals of the family system [1]. World Health Organization (WHO) (2001) defined mental health as a state of well-being in which a person knows his abilities; can withstand normal psychological stresses of life, can work efficiently and can be useful for the community [2].

The community cannot claim health in case of unhealthy and unbalanced family [3]. The existence of healthy relationships among couples leads to an increase in mental and physical health of the husband and wife, as well as their flexibility against the pressures of life. A large body of studies revealed that couples who have lasting and happy life have longer life expectancy, enjoy more physical health and are less likely to suffer mental illness and psychological problems [4]. However, the creation of an unfavorable condition by marital relations will lead to neurological disorders, depression and even suicide [5]. Dissatisfaction with marital relation negatively affects the health of husband, wife and their children [6], which is accompanied by mental inconsistency and disturbance, feeling of insecurity [7], increased behavioral problems and a range of mental disorders [8], alcohol abuse among men and behavioral problems among children [9].

Hollist showed that tense marital relations result in enhancing the couples' feeling of depression and decreasing self-esteem and self-efficacy [10]. Korporaal et al. [11] reported that there is a relationship between marital satisfaction and mental health and stresses resulted from inappropriate marital relations are related to mental harms, especially depression anxiety disorders. Alipour et al. investigated the relationship between mental health and marital satisfaction and found a positive relation

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between marital satisfaction and mental health and a negative relation between four dimensions of the mental health (depression, anxiety, somatic symptoms, and social function) and marital satisfaction [12]. In another study on 110 university student, the couples expressed higher level of marital satisfaction and less symptoms of neuroticism [13].

Marital satisfaction is defined as a reflection of how happy people are in marital relations [14]. Satisfied couples have many agreements with each other, are satisfied with their relationships and are good mangers of leisure time and financial issues [15]. Cornelius and Alessi found that educating couples leads to an improvement in marital satisfaction and plays a significant positive effect on interpersonal communications [16].

So far, many efforts have been made to increase marital satisfaction [17], which led to the formation of interventional and preventive strategies which can be divided into three general categories including: a) pre-marriage preparation plans, b) post-marital enrichment program, and c) marriage counseling for incompatible couples [18]. Post-marital enrichment teaches couples the skills they need to face life challenges and prepares them to deal with and prevent from expanding the problems [19].

In general, marriage enrichment programs aims to help couples to know themselves and their spouses, explore the emotions and thought of their spouses, and expand the empathy, intimacy and effective communication [19]. Research evidence has also supported the goals and outcomes of the enrichment program and showed that these programs result in improving the quality of communications, increasing problem-solving ability and enhancing mental health [20]. Some researchers showed that teaching skill collection to couples and Marriage Enrichment Program prevent the outbreak and spread of marital problems [16, 20].

Given the above-mentioned factors, it seems that education can help to improve the level of marital satisfaction level and physical-mental health by changing the couples' knowledge and performance. On the other hand, couple therapists believe that newly married couples with inefficient behavior pattern are more likely to improve their relations by attending to preventive programs, compared to the couples who have been involved in a negative communication pattern for many years.

Therefore, the necessity of required measures and development of educational programs is raised more than ever. However, the problem is that almost holding all educational programs is time-consuming and they focus on a simultaneous presence of both husband and wife in educational sessions. Further, one of the problems of these interventions is the unwillingness of most men to attend these educational sessions [21]. As a result, couples who are not able to attend educational sessions for any reason cannot use these instructions. Hence, it is noteworthy to test alternative and new methods, which can educate couples using motivation and co-operation capacity of both couples and spending less cost and time.

On the one hand, the emergence of new technologies brought about dramatic changes in the teaching and learning process. A recent survey showed that about 55% and 51% Iranian men and women are member of at least one social network, respectively, the most popular of which is Telegram [22]. Therefore, using positive and contributing aspects of these methods in family education should not to be ignored.

Therefore, feeling of need in this field led researchers to design a distance marriage enrichment program for the first time in Iran, which is based on the approach of Prepare/Enrich Program (PEP) and using different media.

The present study aimed to determine the effect of marriage enrichment via distance learning on mental health and its dimensions including somatic symptoms, anxiety and sleep disorder, social function and depression among couples based on the following hypotheses:

1- Marriage enrichment program via distance learning will improve the mental health significantly in the experimental group.
2- Marriage enrichment program via distance learning will improve the dimension of Somatic symptoms significantly in the experimental group.
3- Marriage enrichment program via distance learning will improve the dimension of Anxiety and sleep disorder significantly in the experimental group.
4- Marriage enrichment program via distance learning will improve the dimension of Social Function significantly in the experimental group.
5- Marriage enrichment program via distance learning will improve the dimension of Depression symptoms significantly in the experimental group.

Materials and Methods

Design

The present study was quasi -experimental including experimental and control group with pretest-posttest and follow-up design.

Statistical population and sampling method

The statistical population of the present study included all couples living in Gonbad-e-Kavus city (northeastern Iran), who recourse to pre-marriage counseling center (the only counseling center in this city) to register their marriage. This city was selected because its inhabitants are from different Iranian ethnic groups and cultures and has a high rate couples' dissatisfaction.

The subjects were randomly selected. First, a list of all couples who got married six month ago was prepared. Then, 200 couples who volunteered to participate in the research project and had the selected criteria were registered via telephone call, then `among whom 80 couples were randomly selected and divided into one experimental (n=40couple) and control (n=40couple) group.

The inclusion criteria included first marriage, the tendency of both couples to participate in the research, passage of six month from the date of marriage, having at least high school diploma, lack of suffering from any chronic physical and mental illness (according to person's admission or the history of

hospitalization), lack of any severe mental crisis over the past six months, and a lack of dependency on drugs and alcohol. In addition, both couples were required to have an Android cell phone and be a member of Telegram social network.

Further, the exclusion criteria included any participation in the same educational program or studying psychology or family counseling, husband's unemployment and outbreak disastrous incidents (death of loved ones or disability-led incidents) at the time of the program.

Instruments

In order to collect the related data, the following questionnaires were used:

Demographic information questionnaire: it includes gender, ethnicity, age, age difference with spouse, education level, how got to know the spouse, type of marriage, occupation and financial situation.

General Health Questionnaire (GHQ28): it is regarded as a standardized form of 28 items designed by Goldberg and Hiller in 1979 for screening non-psychotic psychological disorders. This questionnaire measures four dimensions of mental health including 1. Somatic symptoms (items 1-7); 2. Anxiety and sleep disorder (items 8-14); 3. Social function (items 15-21), and 4. Depression symptoms (items 22-28).

The questionnaire is based on four-point Likert scale, each of which (A-D) is cored 0, 1, 2 and or 3. As a result, each individual is scored 0-21 in each dimension and 0-84 in the total questionnaire. The scores of each subject are calculated separately for each dimension, then the score of the four dimensions are summed up and the total score of mental health is calculated.

The validity and reliability of this tool were confirmed in various studies [23-25]. Nazifi et al. [26] reported a Cronbach's alpha coefficients of 0.86, 0.88, 0.74 and 0.89 for the dimensions of somatic symptoms, anxiety and sleep disorder, social function and depression, respectively. In addition, in the present study, a Cronbach's alpha of 0.86, 0.72, 0.79 and 0.77 was obtained for the dimensions of somatic symptoms, anxiety, social function and depression, respectively.

Intervention

Both experimental and control groups were given a pretest before intervention and completed the demographic and GHQ28 questionnaires.

The Prepare/Enrich Program approach was used to prepare the educational package, and the results of initial need assessment, pre-test analysis, and opinion poll of family counseling specialists were used to prepare the educational content. In addition, the cultural and religious issues related to the research community were taken into consideration. Finally, an educational package including 6 topics was developed and applied for the experimental group for 12 consecutive weeks (Table 1). However, the control group received no training and waited in the queue.

Before intervention, the couples in the experimental group were invited to attend a 90-min meeting and were provided by description about the manner of implementation of educational intervention and performing practical techniques and practices at home and were asked to join the educational channel of research in Telegram (husband and wife separately). Then, the distance intervention stages were applied from the end of the 7th month of marriage as follows:

1. At the beginning of each educational topic, a package including educational booklet, pamphlet, poster and DVD (movies and animations), as well as the handbook of practical home practices were sent to the house of couples by special delivery (package delivery was followed up via post office SMS, and the couples also informed the researcher of receiving each package by sending him and SMS).
2. Five SMSs were sent to the couples every day at a specific hour (20:30 pm), and were asked to send a blank SMS to the server to ensure the researcher of its delivery.
3. Movies, animations and educational materials related to each topic were uploaded in the training channel on the Telegram (every night at 21- 21-30 pm).
4. At the end of each educational topic, the couples were asked to perform the respective practical techniques based on the manual at home and the way of doing these practices were evaluated and followed up by the researchers via phone call, sending SMS or Telegram channel.

After presenting the last educational topic (post- intervention) as well as 6 months later (follow-up period), both experimental and control groups recompleted the GHQ28 questionnaire and the data were collected.

Table 1: A summary of intervention topics and educational goals

Title	Educational goals	Duration
1.Cognitive reconstruction	1.Informing the couples of all kinds of irrational thoughts 2.Teaching ways to deal with irrational beliefs 3.Teaching correction of irrational beliefs 4.Practicing practical techniques of correcting wrong beliefs	Two weeks
2.Effective communication and intimacy	1.Describing effective interpersonal communications and the ways for their creation 2. Explaining the concept of intimacy and its dimensions 3.Adopting ways to establish intimacy 4.Implementing practical techniques for creating intimacy	Two weeks
3.Sexual communication and respective issues	1.Expressing the sexual cycle 2. Expressing the importance of sexual relations 3. Investigating the barriers for satisfactory sexual relations 4. Identifying and treating sexual myths 5. Implementing practical techniques for expressing assertive desires	Two weeks

4. Couples' conflict and conflict resolution	1.The concept of conflict in marital relationships and understanding its naturalness 2. Identifying the barriers to conflict resolution 3- correct roles and principles of conflict resolution 4- implementing the practical techniques of conflict resolution	Two weeks
5.Problem-solving process	1.Defining the problem-solving process 2. Teaching the steps of problem-solving process 3. Implementing the practical techniques of problem-solving	Two weeks
6.Home Management Training	1.Parental and childbirth management 2.Managing communication with the spouse's family, friends and acquaintances 3.Managing and planning the leisure time 4.Managing financial issues 5.Implementing practical home management techniques	Two weeks

Data Analysis

The related data were analyzed by using SPSS21 software and employing Chi-square, paired and independent sample t-test, and Analyze of Covariance (ANCOVA Test) with a significance level of $p<0.05$ in all tests.

Results

The results showed that no significant difference was observed between the experimental and control group in terms of demographic characteristics. In other words, the two groups were homogeneous (Table 2). In addition, as shown in Table 3, the independent t-test result indicated that no significant difference was observed in the pre-test mean of mental health and its dimensions among the two groups (Table 3). In fact, any change observed in the experimental group was independent of the initial differences among participants and could be related to the effect of educational intervention.

Mental Health

The results showed that there was a significant difference between the mean of mental health in the experimental and control groups in the post-intervention. In other words, distance intervention led to a significant improvement in the level of mental health among the experimental group ($F=275.042$; $p<0/001$) (Tables 4 & 5). Further, as displayed in Tables (6 -7 and Fig.1), the results showed that the positive effect of the intervention on mental health remained during the follow-up period, 6 months later ($p<0/001$).

Somatic Symptoms

The results revealed a significant difference between the mean of somatic symptoms in the experimental and control groups in the post-intervention. In fact, distance intervention resulted in improving the somatic symptoms among the couples in the experimental group ($F= 85.533$; $p<0/001$) (Tables 4 & 5). In addition, the positive effect of the intervention on somatic symptoms remained during the follow-up period, 6 months later ($p<0/001$) (Tables 6 & 7 and Fig.2).

Anxiety and sleep disorder

The results showed that there was a significant difference between the mean of Anxiety and sleep disorder in the experimental and control groups in the post-intervention. In other words, distance intervention brought about a significant improvement in the anxiety and sleep disorder symptoms among the experimental group ($F=124.466$; $p<0/001$) (Tables 4 & 5). Further, the positive effect of intervention on the symptoms of anxiety and sleep disorder remained during the follow-up period, 6 months later (Tables 6 & 7 and Fig.3).

Social Function

The results showed that there was a significant difference between the mean of social function in the experimental and control groups in the post-intervention. In other words, distance intervention lead to a significant improvement in the social function among the couples in the experimental group ($F= 82.408$; $p<0/001$) (Tables 4 & 5). Further, the positive effect of intervention on the social function lasted in the follow-up period, 6 months later ($p<0/001$) (Tables 6 & 7 and Fig.4).

Depression symptom

The results showed that there was a no significant difference between the mean of depression in the experimental and control groups in the post-intervention ($P>0.05$) (Tables 4 & 5). In addition, the results demonstrated no significant difference between the two groups in the follow-up period (Tables 6 & 7, Fig. 5).

Discussion

Based on a new approach, the present study selected the newly married Iranian couples to investigate the effect of the marriage enrichment program via distance learning on mental health and its dimensions (somatic symptoms, Anxiety and sleep disorder, social function and depression). The selected couples in the experimental group received various trainings of the enrichment program through various media and performed their practical techniques at home. The findings revealed that participating in this program led to a significant improvement in the level of mental health, regardless of communication styles, the degree of inconsistency and the mental health of couples at the beginning of the course. In addition, the positive achievements of this intervention were not limited to the time it was provided and were maintained at the follow-up stage. Although the researcher could not find a study similar to the intervention method in the present study, the obtained results were in line with those of some other studies. For instance, investigating the effect of couple interventions based on the theory of Ellis in the form of internet instruction, Pooyamanesh et al. found that this intervention led to an increase in marital satisfaction and mental health [27]. Regarding the effectiveness of couple therapy with self- regulation training style on mental health, Fatehezadeh et al. showed that this teaching can increase the mental health among couples [28]. Given the effect of life quality improvement program on marital satisfaction and mental health, Kazemi et al. found that this intervention led to

an increase in these two variables and this effect lasted over a one month follow up [29].

Brouwer et al. demonstrated that teaching to change lifestyle via the internet significantly affected the general health of the members of Internet networks so that the general health score of these individuals increased significantly compared to 3 months before taking part in the virtual lifestyle education course [30].

In general, a review of the research background showed that educational interventions for improving life and marital relationships results in increasing couples' mental health. It seems that marriage enrichment teaching can also help couple in evaluating and self-changing in problematic areas of the life, which creates a calm and promising atmosphere in the family, as well as an increased mental health.

On the other hand, most studies confirmed that marriage enrichment helps to enhance marital satisfaction [31-34]. Furthermore, some reported the close relationship and positive correlation between marital satisfaction and mental health among couples [16, 35, 36].

Therefore, any intervention which can reduce the inquietude and dissatisfaction among couples plays a positive effect on their health. The present study also improved the mental health among the couples indirectly through influencing and increasing their marital satisfaction.

In addition, the findings of present study showed that distance intervention could reduce the mean of somatic symptoms in GHQ scale and improve the couples' physical conditions, further, the positive effects of this intervention continued in the follow-up stage, thus affirming the second hypothesis of the research. The finding is in line with the study results of Torkashvand [37].

The people, who get married, are often faced with problems and inconsistencies in the first few months, which threaten the stability of life and satisfaction with marital relation if not resolved [38]. In addition, if continued, couples would experience many emotional stresses and physical and psychological complications, which can be largely reduced by preventive interventions [39].

In the present study, by using marriage enrichment program as a preventive program, varied and versatile skills were taught to the couples who were in the early stages of marital life, so that they can make effective changes in themselves and their marital life. It seems that these educations can fulfill the expected roles and the negative feeling and emotional stresses of couples were reduced due to the positive changes. Since there is a close and mutual relationship between the body and the soul, the health of one side appears in the health of another side; it can be concluded that the intended intervention led to an improvement in somatic symptoms among couples.

Furthermore, South and Krueger found that marital inquietude and conflicts are related to physical health weakness [40]. Whitson et al. stated that marital conflicts are identified as a risk factor for reducing the physical health among couples and their children [41].

Therefore, as the problem-solving and conflict resolution skills were regarded as one of the main foundations of education in the present study, the report on the improvement of somatic symptoms among couples cannot be unexpected.

In addition, the findings of the present study revealed that the distance intervention results in decreasing the mean of anxiety and sleep disorder symptoms among the couples in the experimental group and these positive changes were also maintained in the follow-up stage, thus affirming the third hypothesis of the research.

Solomon believes that communication improvement is an important factor in reducing the anxiety in the couples' relationships [42]. The results of research in Iran showed that applied training of relaxation significantly reduced the anxiety and perceived stress in the experimental group [43]. It seems that teaching communication skills in the present study led couples to express their positive and negative emotions and their particular issues to each other and accordingly their negative emotions and their stresses are reduced through subtle conversations and understanding and accepting each other. Based on a review of some studies, Segrin and Rynes stated that having positive communications with others, helps in reducing depression and anxiety and eventually increasing mental health [44].

Gordon et al. believe that teaching communication skills and the couples' appreciation from each other helps in reducing their anxiety and improving their mental health [39].

On the one hand, the principles of satisfactory sexual relations and explicit way of expressing desires were taught to couples in the present intervention. It seems that the improvement of couple's conditions in these areas also helped to reduce the anxiety and negative relationships between couples. Further, it seems that the distance education can eliminate or reduce the challenges faced by face-to-face teaching methods. The availability of counselor could also play a palliative role for the participants. All these factors together can well explain the reduced anxiety of couples.

Furthermore, the findings indicated that distance intervention can improve the social function among couples and these changes can last in the follow-up stage, thus affirming the fourth hypothesis of the research. The findings are in line with the study of Moradi and Sharifidaramadi [45] in which this teaching method could improve the students' social function. The researcher believes that the results can be related to the similar intervention and simultaneous use of numerous media in implementing this educational intervention.

However, Torkashvand et al. found that face-to-face counseling did not have any effect on the social function among the couples applying for divorce, even in the six-month follow-up stage [37], which is inconsistent with the finding of the present study. Different statistical population, different samples and maybe intervention implementation method can be mentioned to explain this contradiction.

In the present study, it seems that the couples' social function improved indirectly through improving the couples'

interactions in the form of increasing respect, intimacy and common social and recreational activities. In other words, the couples' enjoyment of communication skills such as sympathy, intimacy, acceptance and understanding and problem solving can lead to the increased satisfaction of couples with their interactions and common activities compared to pre-intervention stage, which resulted in creating more relaxation and improved conditions for individual and social performance.

Further, doing exercises and practical practices at home and daily repetition of positive behaviors such as ignoring errors, suitable communication with the relatives and family of the spouse, expression of love, and common recreational activities can provide couples with a decent opportunity to improve their intimate relationships and facilitate their social function by creating a feeling of security at home.

Finally, the distance intervention could not play any significant effect on the mean of depression among couples, thus rejecting the fifth hypothesis of the research, which was not in line with the previous studies. A large number of studies showed that educational interventions helped to increase happiness and improve the depression symptoms in couples. Regarding family-centered interventions, Blancho showed that these interventions lead to increased happiness in family [46].

According to Gordon et al., teaching communication skills and couples' appreciation can affect their mental health [39]. Regarding the effect of couple therapy with self-regulation, Fatehezadeh et al. showed that this instruction results in increasing mental health and decreasing depression among couples [28]. The level of couples' depression before the intervention, can be used to explain this difference. Based on the mean scores, the couples had a mild level of depression before intervention and no significant difference was observed between the two groups after the intervention despite a slight improvement in experimental group. Hence, it seems that no explicit symptom of depression was observed in couples before the intervention and accordingly no significant change was observed in this dimension after the intervention.

Conclusion

The results of this study showed that marriage enrichment via distance learning is regarded as a successful program in improving mental health and its dimensions among couples and these

It seems that the positive features of the training such as facility, availability and cost-effectiveness, added to the effectiveness of this intervention because it motivated couples who did not have time and motivation to attend classes in person in order to benefit from counseling methods more easily.

Therefore, using the new technologies, especially the use of cyberspace, counseling and educational interventions can be delivered faster and in higher quality. Further, distance interventions can be employed as an effective solution to increase the happiness and mental health among couples and families.

Strengths and Limitations:

Designing a distance educational package based on new communication technologies for the first time in Iran is among the unique features in the present study. On the other hand, none of the couples refused to continue to follow-up the program and perform the assignments in the present study. However, the following limitations can be raised:

1. The present study was conducted in Gonbad-e-Kavous city. Hence, caution should be taken in generalizing the results to other statistical communities, especially rural ones.
2. The participants were required to have at least high school diploma to be included in the study; therefore, caution should be taken in generalizing results to individuals with higher education.
3. There was a lack of research background and sufficient resources in the field of marriage enrichment by distance intervention.

Ethical Considerations

Ethical code of IR.TMU.REC.1394.38 was obtained from the Ethics Committee of Tarbiat Modares University and the Department of Health Education before starting the project.

Participants were provided with an explanation of research objectives and their informed consent was obtained for participating in the research. The couples were assigned an identification code and they were assured that all their information would be kept confidential.

Each couple was provided with US 15 dollars to help pay for the required Internet; the same amount of money was given to the control group as a gift. The control group was provided with a summary of the educational package, a week after the end of conducting the research.

Conflict of interest:

The authors declare that they have no conflict of interest.

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Table 2: Demographic characteristics in Experimental and Control Group a,b

Variables	Couples Characteristics	Experimental	Control	Chi-square test
Ethnicity	Turkman	25 (31.2) [a]	26 (32.5) [a]	P= 0/942**
	Persian	31 (38.8) [a]	30 (37.5) [a]	
	Others	24 (30.0) [a]	24 (30.0) [a]	
Age, y	Year	27±(4.78) [b]	27±(5.77) [b]	Independent T-test P= 0/656**
Age gap with spouse	Less than 3 years	24 (30.0) [a]	25 (31.2) [a]	P= 0/997**
	3 to 4 years	20 (25.0) [a]	20 (25.0) [a]	
	5 to 6 years	16 (20.0) [a]	16 (20.0) [a]	
	7 years or more	20 (25.0) [a]	19 (23.8) [a]	
Engagement Duration	6 months or less	34 (42.5) [a]	35 (43.8) [a]	P= 0/921**
	7 months to one year	30(37.5) [a]	31 (38.8) [a]	
	More than 1 year	16 (20.0) [a]	14 (17.5) [a]	
Financial situation	Weak	15 (18.8) [a]	14 (17.5) [a]	P= 0/905**
	Medium	52 (65.0) [a]	50 (62.5) [a]	
	Good	12 (15.0)	14 (17.5)	
	Excellent	1 (1.2) [a]	2 (2.5) [a]	
Dating with spouse	Through friends and acquaintances	27 (33.8) [a]	25 (31.2) [a]	P= 0/997**
	Through the introduction of relatives and family ties	26 (32.5) [a]	28 (35.0) [a]	
	At the university or at work	5 (6.2) [a]	5 (6.2) [a]	
	By chance	15 (18.8) [a]	15 (18.8) [a]	
	Others	7 (8.8)	7 (8.8)	
Type of marriage	Marriage with the consent of myself and my family	74 (92.5) [a]	75 (93.8) [a]	P= 0/943**
	Forced marriage	1 (1.2) [a]	1 (1.2) [a]	
	Loving and marrying despite the family's opposition	5 (6.2) [a]	4 (5.0) [a]	
Education	Diploma and more	47 (58.8) [a]	46 (57.5) [a]	P= 0/962**
	Bachelor	26 (32.5) [a]	26 (32.5) [a]	
	Master's degree and higher	7 (8.8) [a]	8 (10.0) [a]	
Job	Self-employment	26 (32.5) [a]	26 (32.5) [a]	P= 0/983**
	Employee	15 (18.8) [a]	14 (17.5) [a]	
	Housewife	31 (38.8) [a]	33 (41.2) [a]	
	Laborer	8 (10.0) [a]	7 (8.8) [a]	

[a] Values are expressed as No. (%).

[b] Values are expressed as mean ± SD

**= P>0.05

Table 3: Comparing the Mean of Mental Health and its Dimensions in Pre-intervention Among two Groups

Variable	Group	Stage	Mean	SD	P- value
Mental Health	Experimental	Pre-intervention	64.06	7.794	0/250**
	Control	Pre-intervention	62,71	6.989	
Somatic Symptoms	Experimental	Pre-intervention	16.40	2.499	0/973**
	Control	Pre-intervention	16.39	2.236	
Anxiety and Sleep Disorder	Experimental	Pre-intervention	17.51	4.360	0.765**
	Control	Pre-intervention	17.32	3.532	
Social Function	Experimental	Pre-intervention	20.99	3.396	0.413*
	Control	Pre-intervention	20.55	3.019	
Depression Symptoms	Experimental	Pre-intervention	9.16	2.626	0.061**
	Control	Pre-intervention	8.45	2.122	

**= P>0.05

Table 4: Mean and SDs of Mental Health and its Dimensions in different stage Among two Groups

Group	Experimental Group						Control Group					
Variable	Pre-intervention		Post-intervention		Follow-up		Pre-intervention		Post-intervention		Follow-up	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Mental Health	64.06	7.794	49.08	7.352	46.47	6.777	62.71	6.989	63.06	7.335	63.04	6.718
Somatic symptoms	16.40	2.499	11.82	2.967	10.70	2.725	16.39	2.236	16.11	3.593	15.98	3.081

Anxiety and Sleep disorder	17.51	4.360	12.49	4.328	11.88	3.918	17.32	3.532	17.39	3.757	17.29	3.569
Social Function	20.99	3.696	15.95	3.673	15.19	3.715	20.55	3.019	20.70	4.487	20.85	4.450
Depression symptoms	9.16	2.626	8.81	2.239	8.71	2.026	8.45	2.122	8.86	2.342	8.92	2.288

Table 5: The results of ANCOVA test after Intervention, to examine the Effect of Distance intervention on Mental Health and its Dimensions

Dependent variable	Type III Sum of Squares	def.	Mean Square	F	Sig.	R^2
Mental Health	8774.785	1	8774.785	275.042	.000*	.637
Somatic symptoms	738.036	1	738.036	85.533	.000*	.353
Anxiety and Sleep disorder	1027.664	1	1027.664	124.466	.000*	.442
Social Function	1007.739	1	1007.739	82.408	.000*	.344
Depression symptoms	.889	1	.889	.172	.679**	.001

*=P<0.05

**=P>0.05

Abbreviations ANCOVA= One way Analyze of Covariance

Table 6: Comparing the Mean of Mental Health and its Dimensions in Post-intervention and Follow-up Among Two Groups

Group	Experimental group						Control group					
Variable	Post-intervention		Follow-up		T-test result		Post-intervention		Follow-up		T-test result	
	Mean	SD	Mean	SD	T	Sig	Mean	SD	Mean	SD	T	Sig
Mental Health	49.08	7.352	46.47	6.777	1.910	0.209**	63.06	7.335	63.04	6.718	0.022	0.565**
Somatic Symptoms	11.82	2.967	10.70	2.725	1.316	0.906**	16.11	3.593	15.98	3.081	0.260	0.389**
Anxiety and Sleep disorder	12.49	4.328	11.88	3.918	0.938	0.478**	17.39	3.757	17.29	3.569	0.173	0.752**
Social Function	15.95	3.673	15.19	3.715	1.972	0.968**	20.70	4.487	20.85	4.450	-.212	0.910**
Depression symptoms	8.81	2.239	8.71	2.026	0.296	0.555**	8.86	2.342	8.92	2.288	-.171	0.753**

**=P>0.05

Table 7: The results of ANCOVA test in the Follow-up phase, to investigate the Continuation of the Effect of Distance intervention on Mental Health and its Dimensions

Dependent variable	Type III Sum of Squares	def.	Mean Square	F	Sig.	R^2
Mental Health	11862.678	1	11862.678	400.117	.000*	.718
Somatic Symptoms	1115.563	1	1115.563	154.974	.000*	.497
Anxiety and Sleep disorder	1222.571	1	1222.571	154.636	.000*	.496
Social Function	1405.344	1	1405.344	114.267	.000*	.421
Depression Symptoms	3.744	1	3.744	.815	.368**	.005

*=P<0.05

**=P>0.05

Abbreviations ANCOVA= One way Analyze of Covariance

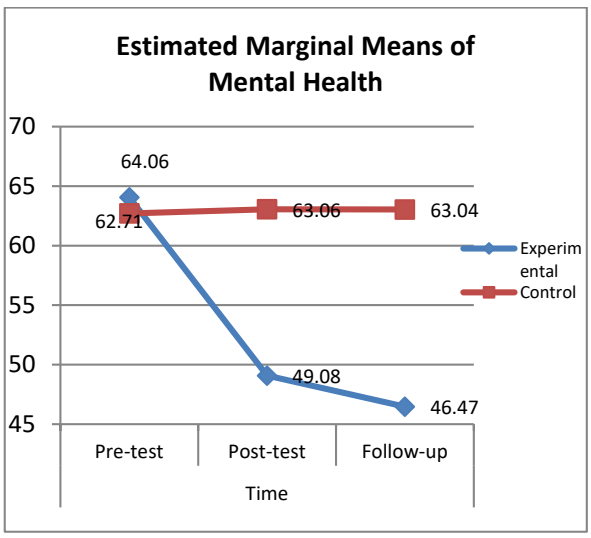

Figure 1: Mean of Mental Health in two groups over time

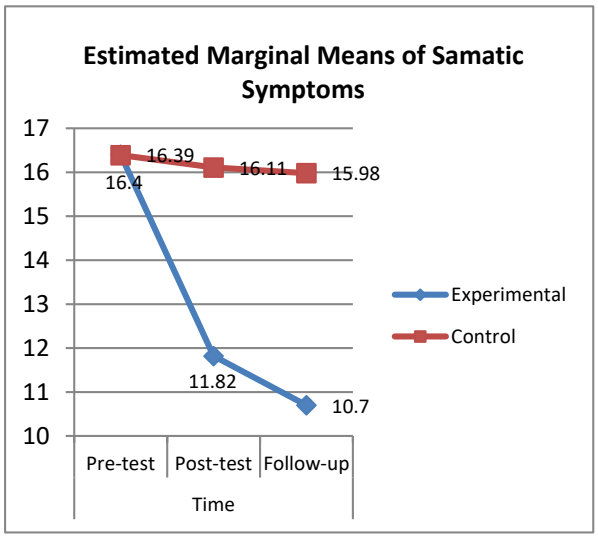

Figure 2: Mean of Somatic Symptom in two groups over time

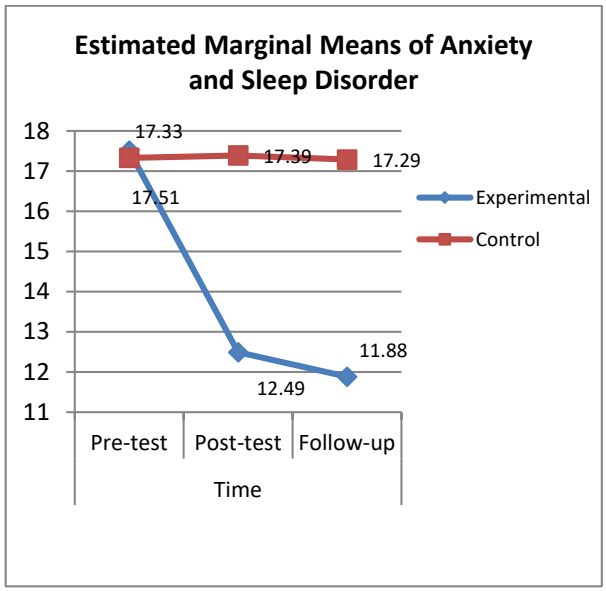

Figure 3: Mean of Anxiety and Sleep disorder in two groups over time

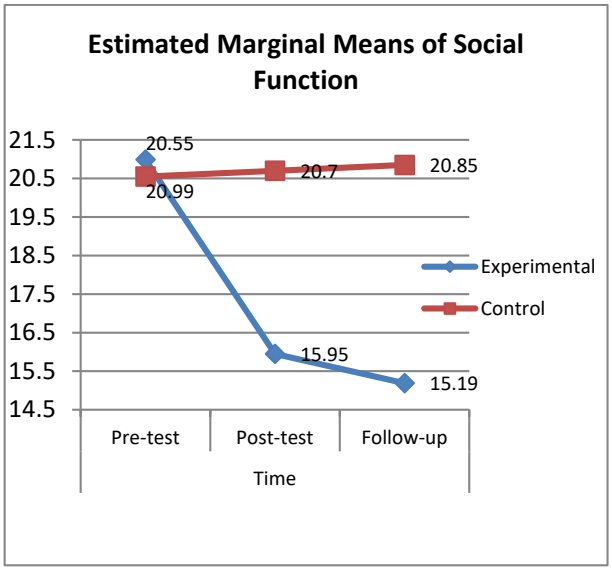

Figure 4: Mean of Social Function in two groups over time

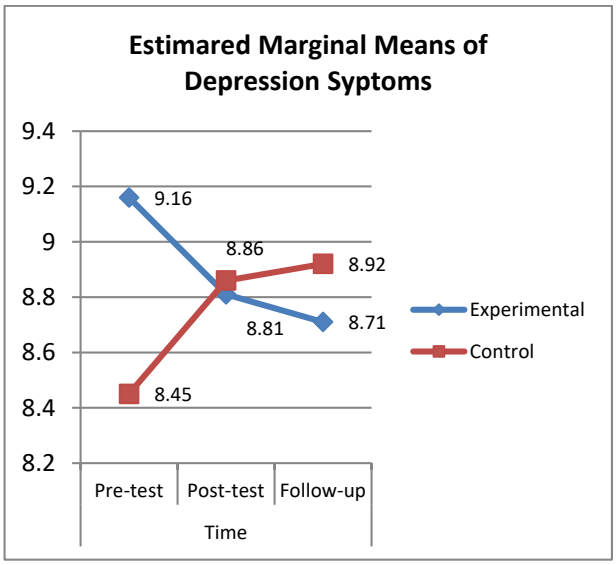

Figure 5: Mean of Depression Symptom in two groups over time.

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